TS100-E8-PI4

Configuration Guide

First Edition
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Contents

Contents iii
Safety information iv

Chapter 1: Product introduction
1.1 Key features 1-2
1.2 System overview 1-3
1.3 Front panel features 1-4
1.4 Rear panel features 1-5
1.5 System specifications 1-6

Chapter 2: Components
2.1 Upgrading CPU and CPU heatsink 2-2
2.2 Upgrading system memory 2-2
2.3 Upgrading hard disk drives 2-3
2.4 OS support list 2-4

Safety information

Electrical Safety

- Before installing or removing signal cables, ensure that the power cables for the system unit and all attached devices are unplugged.
- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing any additional devices to or from the system, contact a qualified service technician or your dealer. Ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you service.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your dealer.

Operation Safety

- Servicing of this product or units is to be performed by trained service personnel only.
- Before operating the server, carefully read all the manuals included with the server package.
- Before using the server, ensure all cables are correctly connected and the power cables are not damaged. If any damage is detected, contact your dealer as soon as possible.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Place the server on a stable surface.

This product is equipped with a three-wire power cable and plug for the user's safety. Use the power cable with a properly grounded electrical outlet to avoid electrical shock.

Lithium-Ion Battery Warning

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

CD-ROM Drive Safety Warning

CLASS 1 LASER PRODUCT

Heavy System

CAUTION! This server system is heavy. Ask for assistance when moving or carrying the system.

Chapter 1

This chapter describes the key features of TS100-E8-PI4. It includes the product overview and general specifications.

Product introduction

1.1 Key features

The ASUS TS100-E8-PI4 is a pedestal barebone server system featuring the ASUS P9D-X/MR server board. The server supports Intel® LGA1150 Xeon® E3-1200 v3 processors with the latest technologies through the chipsets onboard with support for up to 32GB of DDR3 1333Hz unbuffered ECC memory.

Upscaled performance increases processing speeds, while the super-quiet design makes the TS100-E8-PI4 ideal for professional environments where noise reduction is important.

The latest Intel® CPUs

The TS100-E8-PI4 is ready for new-generation Intel® Xeon® 22nm processors, which deliver a significant performance improvement over previous-generation CPUs.

Energy saving and super-quiet tower server perfect for SMBs

The ASUS TS100-E8-PI4 is an entry-level tower server supporting the latest Intel® Xeon® E3-1200 v3 processor family with onboard RAID and complete remote server management through ASWM Enterprise. It also features an 80 PLUS Bronze power supply for enhanced energy savings, and facilitates work environments as quiet as 27dB (under idle mode), which is significantly quieter even than the average projector.

PCI Express 3.0-ready with workstation expandability

The TS100-E8-PI4 ships with one PCI Express 3.0 x16 slot, designed to accommodate the power of graphics cards and other add-on components. To ensure flexibility, it has a PCI slot for legacy LAN card, graphics card, and audio card applications. A dedicated MIO slot provides customers additional audio capability options through ASUS MIO cards.

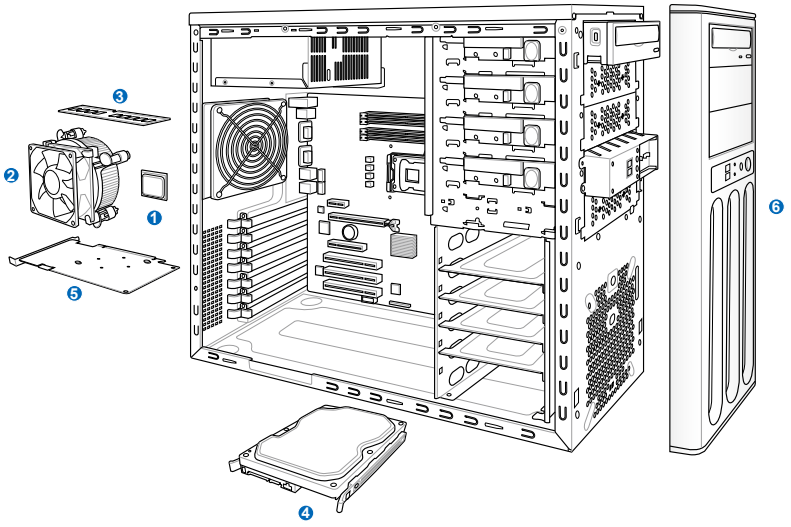
Ultra-quiet and energy saving

The TS100-E8-PI4 performs as quiet as a low 27dB (under idle mode), which is less than the noise output of a projector (average 42dB). It therefore offers a super-quiet environment, and ships with an 80 PLUS Bronze power supply to reduce power loss and power consumption, helping consumers save on energy bills.

Comprehensive remote management

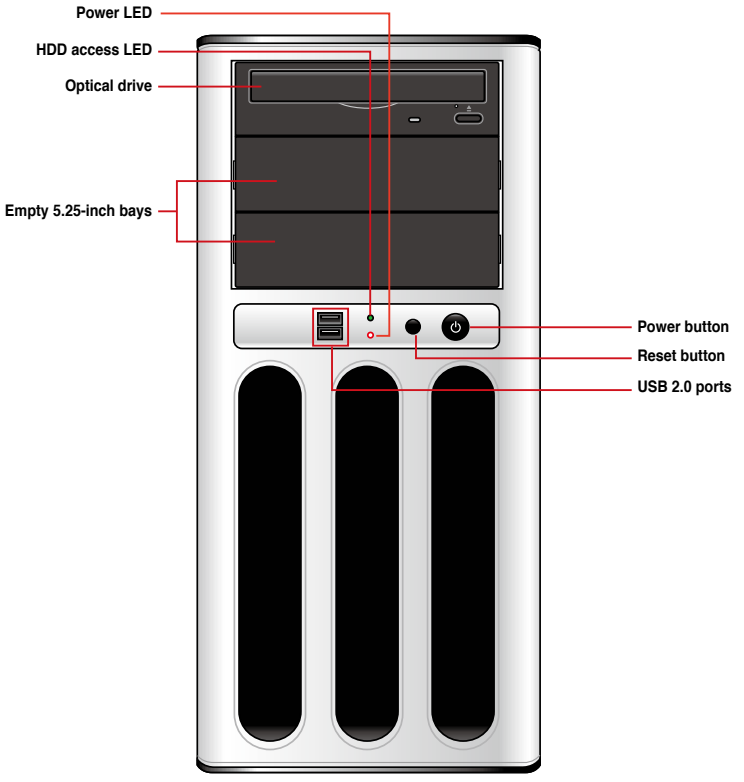
ASUS presents the most complete remote server control, with ASWM Enterprise providing “one on many” usage. ASWM Enterprise‘s centralized design gives administrators access to BIOS updates, remote control, and power supervision on all servers simultaneously. IT professionals don’t have to monitor servers one by one, but can instead use ASWM Enterprise to check the status of all servers through a friendly graphical user interface.

1.2 System overview

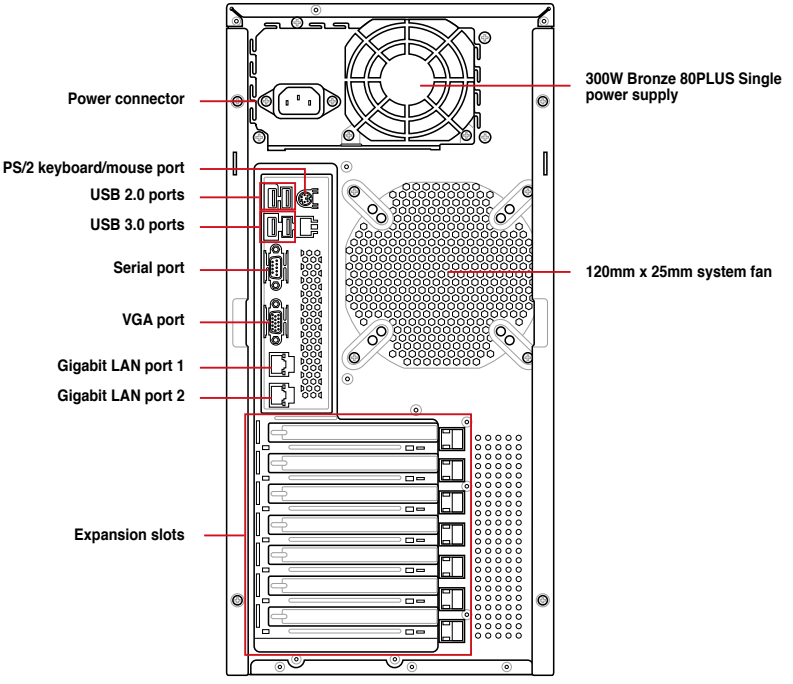


Items	Items
1. Central processing unit (CPU)	4. Hard disk drives
2. CPU heatsink and fan	5. VGA card (optional)
3. System memory	6. Front Panel Cover

1.3 Front panel features



1.4 Rear panel features



1.5 System specifications

Model Name		TS100-E8-PI4
Processor / System Bus		1 x socket LGA1150 Intel® Xeon® Processor E3-1200 v3 Product Family
Core Logic		Intel® C222 PCH
Memory	Total Slots	4 UDIMM (2 Channels)
	Capacity	Maximum up to 32GB (UDIMM)
	Memory Type	DDR3 1333/1600 ECC UDIMM
	Memory Size	2GB, 4GB, 8GB
Expansion Slots	Total PCI/PCI-X/ PCI-E Slots	6
	Slot Type	1 x PCI-E x16 (Gen3 x16 link) 1 x PCI-E x8 (Gen2 x4 link) 3 x PCI 32 bit/33 MHz 1 x MIO slot
Storage		**Intel® C222:** - 4 x SATA 3Gbps ports - 2 x SATA 6Gbps ports - Intel® Rapid Storage Technology Enterprise (RSTe) supports software RAID 0, 1, 10, & 5 (Windows)
HDD Bays	I = internal A or S = hot-swappable	4 x Internal 3.5-inch HDD Bays
Networking	LAN	2 x Intel® I210AT controller
Graphic	VGA	Aspeed AST1300 64MB
Auxiliary Storage FDD / CD / DVD		3 x 5.25-inch media bays (Options: No ODD / DVD-RW) (DVD-RW default for North America)
Onboard I/O		1 x External Serial Port 2 x RJ-45 ports 2 x USB 3.0 ports (Rear x 2) 4 x USB 2.0 ports (Front x 2, Rear x 2) 1 x VGA port 1 x PS/2 keyboard/mouse port

(continued on the next page)

OS Support		Windows® Server 2012 64-bit Windows® Server 2008 Enterprise SP2 64-bit Windows® Server 2008 R2 Enterprise SP1 64-bit RedHat® Enterprise Linux AS 5.8/6.2/6.3 64-bit CentOS 5.6/6.2/6.3 64-bit Ubuntu 12.04 64-bit
Anti-virus Software		Optional Anti-Virus CD Pack
Management Solution	**Software**	ASUS ASWM Enterprise
Dimension (HH x WW x DD)		436.8 mm x 200 mm x 478.8 mm
Net Weight Kg (CPU, DRAM & HDD not inclu ded)		15 Kg
Power Supply		300W Bronze 80PLUS Single Power Supply
Power Rating		100–127 / 220-240 Vac, 6/3A, 60–50Hz, Class I
Environment		Operation temperature: 10°C–40°C / Non operation temperature: -40°C–70°C Non operation humidity: 20%–90% (Non-condensing)

***Specifications are subject to change without notice.**

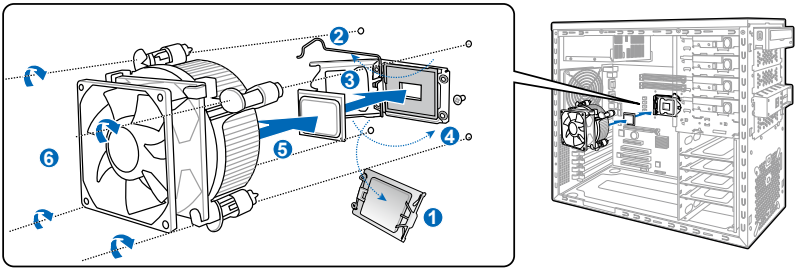
Chapter 2

This chapter lists the key components and optional accessories for the server system.

Components

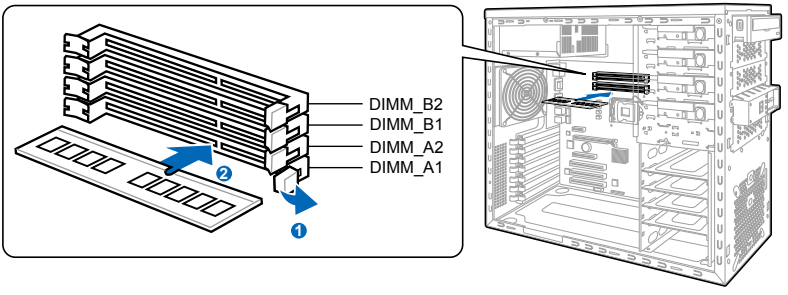
2.1 Upgrading CPU and CPU heatsink

The ASUS TS100-E8-PI4 supports Intel® LGA1150 Xeon® E3-1200 v3 processors.



2.2 Upgrading system memory

The motherboard comes with four (4) Double Data Rate 3 (DDR3) Dual Inline Memory Modules (DIMM) sockets.



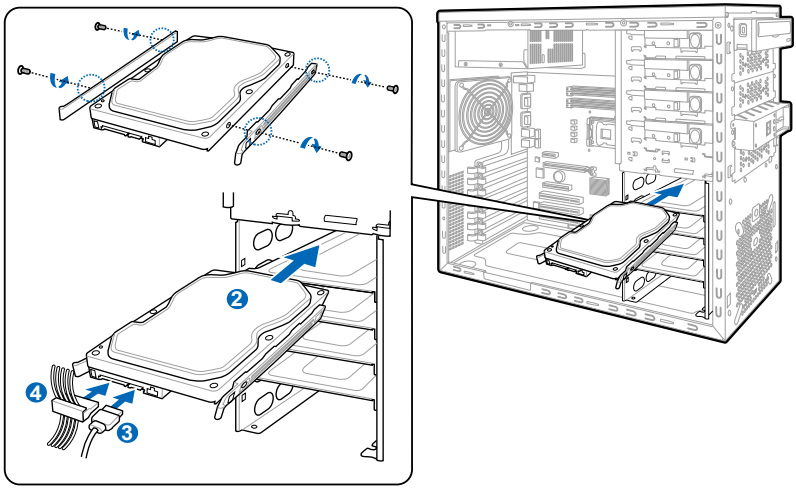
You may install 2 GB, 4 GB, 8GB Unbuffered with ECC DDR3 DIMMs into the DIMM sockets using the memory configurations in this section.

UDIMM				
DIMM Slot Per Channel	DIMM Populated per Channel	DIMM Type	Speed	Rank per DIMM
2	1	Unbuffered DDR3 ECC	1333/1600	Single Rank, Dual Rank
2	2	Unbuffered DDR3 ECC	1333/1600	Single Rank, Dual Rank

- Always install DIMMs with the same CAS latency. For optimum compatibility, it is recommended that you obtain memory modules from the same vendor.
- Install the DDR to the A2 or B2 (blue slot) when installing only one memory module to the motherboard.

2.3 Upgrading hard disk drives

The server system supports four (4) Serial ATA hard disk drives with plastic HDD rails.



We recommend that you install identical drives of the same model and capacity for RAID configuration.

2.4 OS support list

OS Support list
Windows® Server 2012 64-bit
Windows® Server 2008 Enterprise SP2 64-bit
Windows® Server 2008 R2 Enterprise SP1 64-bit
RedHat® Enterprise Linux AS 5.8/6.2/6.3 64-bit
CentOS 5.6/6.2/6.3 64-bit
Ubuntu 12.04 64-bit
(Subject to change without any notice.)